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What do Participants Perceive as the Attributes of a Good Adventure Sports Coach?

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Abstract

This paper presents a mixed-method investigation of client’s perceptions of a good adventure sports coach. Semi-structured interviews were analysed thematically, and the findings used to inform a subsequent larger survey that sought to verify the importance of the themes identified in the interviews. The findings draw an alignment between the attributes of good coaches in traditional sports, as reported in previous studies, and those of adventure sports coaches. However, they also identify three additional attributes that are critical for good adventure sports coaches: (1) in-depth knowledge of the adventure sports environment, (2) a very high degree of individualisation, and (3) an explicit focus on developing the participant’s confidence. The implications for training adventure sports coaches are discussed.

Keywords: adventure sports coaching, coach’s attributes, coach’s knowledge, individualisation, self-efficacy

41 Adventure sports are growing in popularity (O’Keefe, 2019), consequently there has
42 been an increase interest in understanding coaching practice in this domain. However, much
43 of the research investigating adventure sports coaching has relied upon the self-reporting of
44 highly experienced and qualified coaches (e.g., Christian, Berry, & Kearney, 2017; Collins &
45 Collins, 2015; Collins, Carson, & Collins, 2016). Similarly, Becker (2009) reports that the
46 majority of coaching research explores the effectiveness of coaching rather than the
47 characteristics of the coach themselves. Becker reports six dimensions of great coaching;
48 coach attributes, the environment, relationships, the system, coaching actions, and influences.
49 And states ‘Great coaches [are not only coaches], but extraordinary people who left lasting
50 impressions on the lives’ on those they coach (p. 112). Reflecting the potential impact of
51 coaches and the impact of adventurous environments on individuals (Mackenzie & Brymer,
52 2018), it seems sensible to extent Becker’s investigation into adventure sports coaching.
53 Additionally, to understand adventure sports coaching practice from a different perspective,
54 we previously investigated what participants sought from their coaching experience
55 (Eastabrook & Collins, 2019) and reported that participants were unable to separate coaches’
56 attributes from the coaching process. Consequently, there are three aspects of this this study;
57 (1) reflecting on the participants’ lack of perceived separation, it seems logical to further
58 investigate what good coaching is in the adventure domain, (2) to continue our original line
59 of investigation into adventure sport coaching from the perspective of participants rather than
60 coach and, (3) to extend and narrow the remit of Becker’s investigation into adventure sports
61 coaching. We expand our earlier study to ask a group of adventure sport coaching
62 participants, What are the attributes of a good adventure sports coach? With the aim to
63 inform and improve adventure sports coach training and education. We first explore the

attributes of good coaches in both traditional and adventure sports as reported in previous studies.

Review of existing literature

Many authors (e.g., Becker, 2009; Cassidy, Jones, & Potrac, 2009; Côté & Gilbert, 2009; Côté & Sedgwick, 2003; Light & Evans, 2013; Nash, Martindale, Collins, & Martindale, 2012; Weiss, Barber, Sisley, & Ebbeck, 1991) have discussed the characteristics of good coaches and offered numerous perspectives of what constitutes good coaches in a range of sports. Commonly, these characteristics include having excellent subject knowledge and interpersonal, pedagogic, leadership, and management skills.

Coaches' knowledge

Côté, Saimela, Trudel, Baria, and Russell (1995) have highlighted the value placed on declarative knowledge by a group of expert gymnastic coaches. This contrasts with Saury and Durand (1998), who suggest that an experienced coach has access to implicit knowledge as 'professional know-how' (p. 264). As Sinfield, Allen, and Collins (2019) recognise, the reality entails a synergy of both declarative and implicit knowledge to achieve the adaptive coaching required in the adventure context. This aligns with the findings of Collins and Collins (2016a, 2016b) and Tozer, Fazey, and Fazey (2007) regarding adaptive requirements. Both sets of authors describe adaptability and flexibility as key attributes of high-level adventure sports coaches, and suggest this is a response to the situational demands created by a hyper-dynamic coaching environment and the complexity of the individual being coached (Collins & Collins, 2015; Collins & Collins, 2016a). Fluid notions of knowledge and expertise seem to be integral to the practices of the coach in adventure sports. Collins, Collins, & Carson (2016) exemplify this as 'knowledge made usable and reliable in context by it becoming tacit following a period of reflection on extensive experience' (p. 5). Indeed,

knowledge gathered from experience via reflection is critical in this regard and is logically developed through interaction with clients, understanding their developmental needs and wants, and a close rapport with them.

The high value of knowledge constructed from reflection on experience may, in part, explain why coaches have been found to see little value in formal coach education as reported by Nelson, Cushion, and Potrac (2006). Similarly Sinfield et al. (2019) argue that more experienced coaches may actually benefit from formalised education because their experience brings context to their training. Therefore, and in agreement with Stoszowski and Collins (2012), it seems necessary to include the reflective skills needed to make sense of lived experiences in coach education. Such approaches clearly help to create the ‘lifelong learners committed to personal growth’ (p. 221) highlighted by Côté (2006) as a key attribute of effective coaches. Lifelong learning within the adventure coaching sector aligns with the sophisticated epistemological position high-level adventure sport coaches hold (Christian, Hodgson, Berry, & Kearney, 2019, Collins & Collins, 2016a). This sophisticated position adds a depth and complexity to the adventure sport coaches knowledge.

Coaches’ interpersonal skills

At the heart of the coach–athlete relationship are coaches’ interpersonal skills. Lafrenière, Jowett, Vallerand, and Carbonneau (2011) describe the relationship between coaches and athletes as one marked by interdependence. In practical terms and particularly pertinent is this interdependence in adventure sports, adventure sports coaches and clients undertake the activity together (Collins & Collins, 2012). Coaching poses an inherent challenge for the coach, who must manage the process with, and for the participant (Buckley, 2012; Pomfret & Bramwell, 2016). Coaches must consider, for example, the difficulty of a task (e.g., chosen climbing route), the influence of the environment (e.g., sea state), or

psychosocial factors (e.g., peer pressure) on the participant while measuring the effectiveness of the coaching relationship. This interdependence requires a two-way flow of information and trust, whereby coaches set appropriate goals for clients and support them to achieve those goals. Mageau and Vallerand (2003) have termed such behaviour as autonomy supportive.

Additionally, the social aspect of adventure sports is recognised as important by Kerr and Mackenzie (2012) and Mackenzie and Brymer (2018). The coach accompanies the client on the adventure, a friendly demeanour and rapport with the client in challenging situations project a positive attitude toward goal achievement (Ianaro, Lehmann-Willenbrock, & Kauffeld, 2015). Likewise, Gray and Collins (2016) report the interpersonal strategies used by adventure sports coaches, including intuitive social engagement, though they suggest this is not used at a strategic level. In team sports, Gearity (2012) reports how interpersonal skills and social engagement can be used to create a positive coaching environment, highlighting a link to the coach's teaching ability.

Coaches' teaching and pedagogical skills

Gearity (2012) states that coaches should be 'knowledgeable of the technical, tactical, and mental skills of their sport and also how to facilitate athletes' learning' (p. 91), namely a declarative knowledge of the activity and also the pedagogic and andragogic skills required to facilitate development. Particularly within adventure sports coaching, coaches face the complexities of individual motivations and hyper-dynamic environmental pressures (Collins & Collins, 2016a). Adventure sports coaches have developed multiple approaches to facilitate effective learning in a variety of contexts (Collins et al., 2016), which may be illustrative of the sophisticated epistemological position (Schommer, 1994) that has been identified in high-level adventure sports coaches (Christian et al., 2017). This sophistication is reflected in the ability to utilise different approaches rather than a fixed didactic approach.

Closely linked with this possible epistemological stance is the stated aim of high-level adventure sports coaches to individualise the coaching process (Christian et al., 2017; Collins et al., 2015). However, it remains unclear what is being individualised. For instance, adventure sports coaches are expected to make decisions on the teaching approach as well as the technical skills to be taught in response to students' learning needs (Collins & Collins, 2016b). A focus on the students' learning needs is, potentially, in contrast to that of traditional sports coaching. Bloom, Crumpton, & Anderson (1999) identified that expert basketball coaches spent 60% of their time teaching the technical and tactical aspects of their game. This difference in focus may reflect the stated aims of adventure sports coaches to develop fully independent performance in their adventure sports students.

Management and leadership skills

The importance of management and leadership for sports coaches is highlighted by Sage (1973), who suggests that the two are synonymous in this context. While athletes look to each other for social trends and team goals, they seek advice from their coaches for leadership and management relating to physical ability and goal attainment (Price & Weiss, 2013). Both Price and Weiss (2013) and Vella, Oades, and Crowe (2012) propose transformational leadership as a structure for achieving good leadership because it fosters confidence and character development. More contextually, however, McElligott (2015) reports the use of both rewards for meeting specific goals, i.e. rest day after summit, and developing their intrinsic motivation to reach the summit. These two approaches are characterised by McElligott as transactional and transformational leadership, hinting at the sophisticated epistemology identified earlier with regard to approach.

Perceptions of adventure sports coaching recipients

The reasons participants seek coaching in adventure sports are important. The motivations to participate in adventure sports are multifaceted (Kerr & Mackenzie, 2012) and complex (Collins & Brymer, 2018), and consequently the perceptions of good coaching may also differ, such as those reported by Ojala and Thorpe (2015) in Finnish snowboarders. More fundamentally, however, Black and Weiss (1992) suggest there is a potential inherent flaw in investigating client or athlete perspectives. Coaches who are perceived by athletes to give more information and praise following desirable performances scored higher on the measures of perceived success and competence. This may challenge the adventure sports coach who may use bandwidth feedbacking, for instance, in order to develop independence and lifelong learning in a participant. Such approaches may not be considered as good by the participant but do reflect the coach's epistemological position. The potential epistemology misalignment could lead to miscomprehension for both coach and client where the participant perceive they are receiving poor coaching but might actually be taught towards a different motivation for participation.

Consequently, understanding what participants perceive as good coaching would appear critical if adventure sports coaches are to be perceived as competent, professional, effective, and offering value for money.

Methodology

A two-part (qualitative and quantitative) mixed-method approach (Robson, 2011) was adopted. Part 1 was a thematic analysis of semi-structured interviews with a small sample size ($n = 15$), which was then used to inform Part 2, a web-based descriptive design survey (Dunlock, 1993) with a larger sample size ($n = 202$).

Part 1: Qualitative phase

Authors

The primary author conducted all the following data collection and analysis. They are a high-level adventure sports coach with ten years' experience working across the UK and Europe. The second author is a highly experienced adventure sport coach with over thirty years of experience coaching in the UK and Europe. Both authors take a pragmatic and subjective epistemological position, one that acknowledges multiple interpretation of reality rather than a grand single theory as such we seek a probable truth rather than generalizable findings.

Participants

The study participants were recruited in a stratified random representative sample (n = 15) against the following criteria: (1) being an adventure sport participant, (2) undertaking a five-day coached adventure sports programme, and (3) openness and willingness to engage in the research. The sample was representative and reflected gender and age (female n = 6, male n = 9, mean age = 43), and predominantly activities (mountaineering and rock climbing; n = 11 and canoeing and kayaking; n = 4).

Data collection

Participants were invited to consider their participation at the start of their coaching programme and were provided with an information sheet. Following agreed consent, semi-structured interviews were conducted face-to-face in a comfortable and convenient location at the end of the programme or via Skype (Deakin & Wakefield, 2014) within five days of the programme end. Interviews were conducted over the autumn, winter, and spring of 2017–18. The interviews adopted an informal approach following the interview guide found in Table 1 and aimed to expose unanticipated themes and develop a better understanding of the responses to the questions (Zhang & Wildemuth, 2006). Participants were asked to recall their recent coaching experience and encouraged to articulate the characteristics of the

particular coach who facilitated that experience. Interviews notes were made during the recording in the form of bracketing (Ahern, 1999), and kept for consideration during later analysis. All interviews were recorded digitally for transcription. This structure was cognitively piloted before use with a smaller representative sample (n = 2) with 2 adjustments made to the structure and 11 changes to language made prior to use (Drennan, 2003).

Insert table 1 close to this point.

Analysis

Interviews were transcribed verbatim and reviewed for accuracy by checking against the digital recording (Braun & Clarke, 2012; Fereday & Muir-Cochrane, 2006). The transcripts were then ‘codified while listening to the original recording’ (J. A. Smith, Larkin, & Flowers, 2009, p. 82) and a thematic analysis was subsequently conducted (Fereday & Muir-Cochrane, 2006). Initial coding of responses was conducted in three cycles to gain saturation from different perspectives, before grouping into low-order themes. Once convergence was found, the process was repeated to gain mid-order themes. This procedure allowed the data to be compared with existing concepts while remaining open to the recognition and comprehension of new themes (Braun & Clarke, 2012). The significance of themes was not solely attributed to frequency but also to the emphasis derived from annotations taken during the interview.

Part 2: Quantitative phase

Following the interviews, a survey was conducted to assess the views of a larger sample who had received adventure sports coaching. The aim was to improve the reliability of the findings from Part 1. Zohrabi (2016) suggested researchers ‘should try to involve most participants in all phases of inquiry’ (p. 259) to utilise the benefits of member checking (Lincoln & Guba, 2005). The use of member checking in this matter reflects the concerns of

Smith and McGannon (2018) and has the aim of seeking confirmation from the same population rather than the individual interviewee. The subsequent question was ‘How important are the attributes identified in Part 1 to a broader population?’

Participants

A convenient, self-selecting sample was utilised with the same criteria as Part 1. Respondents were asked to complete an online survey over the summer of 2018. The link was shared across eight outdoor sport communities on social media, for example, Rock Climbers UK and ‘Slightly’ White Water Kayaking. This resulted in a total of 250 responses, of which 202 were considered acceptable. Incomplete surveys were rejected, with a completion rate of 81%. The self-selecting nature of this sample differed from the demographics in Part 1, with female participants (n = 78, 38%) sampling higher and water-based activities (n = 134, 66%) dominant.

Data collection

The two high-order themes identified in Part 1 informed the questions in the survey design. The mid-order themes acted as the focus for the sub-questions, and alterations to language were made to improve accessibility and understanding. A point allocation method was used as described by Doyle, Green and Bottomley (1997), where respondents were asked to weigh the importance of each mid-order theme by dividing 100 points between all the mid-order themes (respondents had to use all 100 points). For example, a question with three sub-questions could be 98, one, and one, or 33, 33, and 34, depending on the respondent’s feeling. This allocation of points had two advantages. Firstly, it encouraged the respondents to consider the mid-order themes carefully, addressing survey fatigue (Sinickas, 2007) by utilising an alternative to the commonly used Likert scales. Secondly, Part 2 aimed to understand the *relative* importance of the mid-order themes to inform the comprehension of

the high-order themes. Doyle et al. discuss the advantages of ranking and points allocation and, although Doyle et al. report ranking as preferred by users because it required less cognitive effort, this is the reason points allocation was used here: to make the respondents think. A cognitive pilot was also applied to a representative sample (n = 6) (Drennan, 2003) and the language refined as a result. An incentive in the form of a chance to win a shopping voucher was offered for completing the survey with the winner being randomly selected.

Analysis

A simple descriptive statistical analysis was applied to show the mean, standard deviation, and skew for each question.

Results and discussion

Part 1

The thematic analysis of the transcripts found 243 codified units. These were subsequently grouped into ten mid-order themes and two high-order themes, as shown in Table 2. The two high-order themes are coaching behaviours and the capacity to adapt.

Insert table 2 close to this point.

Part 2

The descriptive analysis of the survey is reported in Table 3. This survey identified the relative importance of each mid-order theme within each high-order theme. To give the results the most meaning, the two parts have been integrated within the discussion to give each mid-order theme a sense of relative importance within the two high-order themes.

Insert table 3 close to this point.

Coaching behaviour

277 The participants reported that they utilised the coaches as sources of confidence.
278 Gemma spoke about ‘feeling that the coach gives you the confidence to explore’, referring to
279 the exploration of new experiences as well as her abilities. This attribute of coaching
280 behaviour is the most prominent, with 141 respondents in Part 2 giving it the highest value
281 ($m = 24.9$). The coaches’ role in supporting the development of their clients’ confidence took
282 three forms – verbal reassurance, personal accomplishments, and vicarious experiences – and
283 possibly reflects the risks associated with adventure sports participation. Bandura’s (1977)
284 work on self-efficacy supports the existence of these roles, noting that personal
285 accomplishments are a stronger source of information, while vicarious experiences are less
286 dependable. Alfie recalled a mountaineering experience and said that ‘having reached the
287 summit by the North Ridge is good for [my] confidence’, because his personal goal had been
288 achieved. Dorothy reported that her coach ‘is here telling us it’s fine’, giving a clear example
289 of verbal reassurance. Reuben highlighted the value of vicarious experiences and stated that
290 the coaches ‘recounted their own tales...that no matter what you are trying to do, you feel
291 that they have done it before’. Dorothy gained her confidence through reassurance, Alfie via
292 his accomplishments, and Reuben by engaging with his coach’s prior experiences. Thus, each
293 client seemed to be able to source the information and confidence-building support they
294 needed from their coach.

295 The participants valued interpersonal skills highly, in common with perceptions of
296 good coaching found outside the ambit of adventure sports (Becker, 2009; Black & Weiss,
297 1992; Côté & Sedgwick, 2003; Curran, Hill, Hall, & Jowett, 2015). Sixty-nine respondents
298 ranked this aspect of coaching behaviour as the most important ($m = 23.5$). Rachael
299 highlighted the link between rapport and trust in the coaches’ judgement and stated that a
300 ‘good relationship or rapport with the instructor [coach] is vital because you got to be able to
301 trust their judgement’. Pearce linked rapport with his learning and explained that ‘rapport is

so important for the development of skills', while Griff said that the coaches are 'making sure everyone is getting what they want from the course'. Griff highlighted the relationship between rapport and achieving the client's goals and their desired coaching experience (Eastabrook & Collins, 2019). The coaches appear to be strategically using their rapport with their clients in a more sophisticated manner than previously reported by Gray and Collins (2016)

Participants in this study valued high levels of enthusiasm in their coaches, and it was the third-ranked aspect of coaching behaviour ($m = 20.4$) in Part 2. Dennis broadly asserted that his coach had 'got a really positive outlook on life coming through'. More specifically, Kristian linked the coaches' enthusiasm to their coaching practice, stating that such 'enthusiasm for coaching was infectious', while Gemma declared that her coach 'loves being outside'. This highlights that coaches were enthusiastic about their coaching and the given adventure activity, demonstrating commitment and emotional investment in their clients' development. Such attitudes affect both goal setting and client support in adventurous contexts.

The coach's credibility as a coach and also a respected practitioner of adventure sports appears to be a unique aspect of adventure sports coaching practice, as this was not reported in the literature of traditional sports coaching. While this aspect was implicit in Collins and Collins' findings (2012, 2016a), it was explicit in this study and was ranked fourth by the respondents in Part 2 ($m = 15.8$). Alfie would only receive coaching from someone if 'they have credibility' in *his* terms. While credibility is desirable, it is unclear what makes a coach credible to clients, and thus, how it could be enhanced. Consequently, this is an area that requires further investigation.

Linked closely to credibility is the coaches' capacity to inspire participants. Tommy, for example, stated that 'a highly qualified coach can inspire you to continue learning'. The coaches' ability to be inspirational was ranked fifth ($m = 15.5$) by the respondents. There are two aspects to being inspired in this context. Firstly, the client is inspired by the coach's performance, both as a coach and as a performer, a unique aspect of adventure sports coaches (Collins & Collins, 2012). The clients want their coach to genuinely enjoy their job as this enhances the coaching experience for the client (Eastabrook and Collins, 2019). The second is routed in the developmental goals of the coaching. Inspired clients may be more likely to practice and thus to continue their development independently.

Capacity to adapt

The coaches' capacity to individualise the whole coaching experience was a key factor in the perception of good coaching by the participants in this study. Individualisation was ranked highest by 168 respondents in Part 2 ($m = 24.5$). Individualisation in this context was multifaceted and extended beyond the teaching of individual aspects of a sport, as reported by Ives (2008). For example, Dorothy highlighted the coaches' ability to identify the correct starting point of the coaching process via observation and questioning and stated that 'the coaches are so great at building on where you are as an individual'. Alfie said that his coach was able to give him 'space to work it out, so I'm not just remembering something they've said, I'm actually understanding'. This latter point from Alfie highlights his desire for the coach to align their teaching with how Alfie wants to learn at that point. Jack linked individualisation to risk tolerance, stating that '[I] achieved something I wouldn't have done if he [the coach] hadn't been there', thus linking individualisation back to the development of confidence highlighted earlier. Jack would not otherwise have attempted the activity because of his perception of the involved risk and level of challenge that creates. Additionally and uniquely, individualisation was extended to the participants' conceptualisation of adventure

(see Mackenzie & Brymer, 2018) by the coaches. Dennis explained that the coaching he received allowed him to no longer be 'at the behest of other people's plans', giving him the freedom to make his own decisions regarding his own participation and adventurous experiences.

Jack 'wanted to be imparted knowledge by someone who has been there, done it and knows what they are on about'. The coaches' depth of knowledge was clearly linked with credibility, as cited earlier, and it was ranked as the second most important factor in Part 2 ($m = 23.5$). Such a desire is common in cases of good coaching within other sports, as identified by multiple authors (Côté et al., 1995; Light & Evans, 2013; Nelson et al., 2006). Two additional aspects of the adventure sport coaches' knowledge could be identified: (1) the desire for more knowledge stems from a desire to be independent of coaches, and (2) the coaches are expected to have knowledge of the hyper-dynamic context of their coaching. Tommy exemplified the former: 'when you are doing that on your own, you have to dig from your own experience and knowledge base in order to make that decision'. Moreover, Kristian noted that a good coach has 'been there and can take you to interesting places'. Lori highlighted that participations expect the coaches to have knowledge regarding the environment and coaching, building on their own experiences. This echoes the assertions of Collins et al. (2016), that a coach's knowledge gathered from experience and reflection is critical.

The coaches' ability to observe and analyse was ranked third within the high-order theme ($m = 19.9$) and was an integral aspect of the individualisation of the coaching process. Alfie expected his coach to observe with 'a critical eye and analyse what you are doing and be able to pick up what you are doing wrong'. The participants wanted their coach to act as a critical friend. This highlights the need for coach and client to be in alignment with regard to the client's long-term goals.

Participants valued coaches with a broad range of coaching strategies, ranking this aspect as fourth in Part 2 ($m = 17.3$). Dennis appreciated his coach as he ‘explained something in multiple different ways’ and stated? the rest of the group also valued this. Meanwhile, Alfie noted that his coach was able to offer a more difficult route up to the summit that was their goal ‘rather than picking an easier route’ for the whole group. Clearly, in this case the coach sought to employ several practical strategies to achieve the same goal while also maintaining client security, demonstrating highly individualised and sophisticated judgement.

Dennis expected his coach to find out ‘what are his aspirations, what can he do, [then] modify the course’ to suit him, and a flexible programme was ranked fifth in terms of importance by the respondents in Part 2 ($m = 17.1$). Indeed, flexibility is required both on the part of coaches and their employers/organisations. To meet the aspirations of participants, coaches need to be adaptable within a flexible infrastructure. Additional resources such as transport, extra coaches, or indoor facilities may also be required to this end. However, highly qualified coaches and logistical support for the desired flexibility may have cost-related implications for coaches and their employers, and such options may not always be feasible during a single-course programme.

Attributes of a good adventure sports coach

Participants in this study valued the coaches’ ability to enhance the coaching experience (Eastabrook & Collins, 2019) by utilising a range of nuanced behaviours. The respondents had an expectation of a thorough coaching process distinct from a guided or led experience. People seeking coaching in any sport want their coaches to have the capacity to adapt in response to their learning needs and the environmental demands. However, the high-order themes indicate that three aspects specifically characterise good adventure sports

coaches: knowledge of the environment, the extent and nature of individualisation, and the coach's ability to act as a source of confidence. These aspects extend beyond the descriptors for good coaching in other sports and given the importance placed on these attributes by the participant mean that these could be considered unique to adventure sports coaching.

Knowledge of the adventure environment

It seems critical that coaches possess in-depth knowledge of the adventure sports coaching environment. There are three aspects to the coaching environment. The coaches need to understand the practicalities of coaching in adventurous environments, including where to go, the impact of the weather and its impact (see Aadland, Vikene, Varley and Moe (2017) as an example). Coaches need to be sensitive to the social and cultural environment that is desired by participants of adventure (see Lorimer and Holland-Smith (2012) as an example). This goes beyond merely understanding the dynamic environment as an adventure sport participant and includes how the environment interacts with a task and the individual. The participants expect this knowledge to stem from a coach's extensive experience of the activity and environment. This environmental knowledge extends beyond simple situation awareness as described by Endsley (1997) into the comprehension of the factors causing the situation and an ability to project its implications on the students' learning, however specific research into this is required to more fully understand this aspect of the adventure sport coaches knowledge.

Expansive individualisation of the coaching and adventure experience

The notion of individualisation in adventure sports extends beyond the teaching of technical skills and encompasses the client's perception of good teaching. This involves being able to coach in a way that aligns with clients' perceptions of good teaching to gain their trust and build rapport before exploring more sophisticated approaches to improving

their performance. Closely linked to this is the coaches' tolerance of risk, which allows them to manage the risk-versus-benefit decisions lying at the heart of coaching in this sector (Collins & Collins, 2013) by comprehending the concomitant potential benefits to students' and clients' conceptualisation of participation: specifically, how they want to participate. The latter aspect might include, for example, whether clients are more interested in developing their technical abilities to deal with more challenging environments or in reaching a technical level that satisfies their desired engagement with the wilderness (Eastabrook & Collins, 2019).

An explicit development of confidence

Participants expect coaches to act as a source of confidence, with an appropriate level of challenge is required for the activity to feel authentic enough to achieve goal accomplishment. This level must be judged carefully by the coach, similar to the risk-versus-benefit decision cited above. The participants in this study reported their coaches' use verbal reassurance in their abilities, vicarious experiences lived via the coach, and the coaches' personal accomplishments are helpful for achieving their goals and aspirations. These strategies develop self-efficacy (Bandura, 1977).

Limitations and future research

As reported by Weiss et al. (1991), there is an inherent issue with clients' perceptions of good coaching: namely, coaches who say nice things to participants might make them feel good, but that is not necessarily good coaching. Similarly, 'good' coaching is a subjective term. This subjectivity raises the question of whether what is perceived as good coaching within a commercial setting, i.e., happy, repeat clients, is the same as what is perceived as good coaching in a developmental context. Both contexts are valuable but are not separated in this study, thereby presenting the contentious issue of commodification in adventure sports

(see Beedie & Hudson, 2003; Loynes, 1998; Varley, 2006). The commodification of adventure sports opens a further line of enquiry to understand how commodification affects coaching practice. Additionally, these findings only reflect a sample of British people's perception of good coaching. Therefore, to further understand the perceived attributes of good adventure sports coaches, it seems logical to extend the study size and location. It is a further point of inquiry as it is not clear how coaches develop these attributes, as they do not appear to be aspects of national governing adventure sports coach education. If national governing bodies recognise the need for the attributes detailed in this study, then it seems logical that a further study may be required to determine how these can be developed in novice coaches.

Conclusion

The findings demonstrate that many of the participants' perceptions of good coaching are common to both adventure and traditional sports. However, importantly this study also provides evidence for three key attributes that are particularly critical for and pertinent to adventure sport coaches: (1) a rich and in-depth knowledge of the dynamic coaching environment and how it interacts with the individual; (2) an explicit, highly individualised approach that includes clients' conceptualisation of their participation in adventure sports; and (3) an ability to act on and develop participants' confidence. These perceptions present challenges for the adventure sport coach. Clearly the coach must fully comprehend the learners' needs and motivations. To meet them, be able to employ a range of technical and teaching strategies, and significantly, to have a full understanding of the adventurous setting. These findings offer a different perspective on adventure sport coaching and the way in which coaches might be trained and evaluated. Specifically, measuring coaching beyond the measurement of performance in a traditional sense. Which in turn does demonstrate a need for further research regarding performance in adventure sports. Furthermore, these findings

strengthen the need for further research to investigate how adventure sport coaching knowledge, adventure sport individualisation and confidence is developed for future explicit inclusion in coach education and development.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Aadland, E., Vikene, O. L., Varley, P., & Moe, V. F. (2017). Situation awareness in sea kayaking: towards a practical checklist. *Journal of Adventure Education and Outdoor Learning*, 17(3), 203–215. <https://doi.org/10.1080/14729679.2017.1313169>
- Ahern, K. J. (1999). Ten Tips for Reflexive Bracketing. *Qualitative Health Research*, 9(3), 407–411. <https://doi.org/10.1177/104973239900900309>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Becker, A. J. (2009). It's Not What They Do, It's How They Do It: Athlete Experiences of Great Coaching. *International Journal of Sports Science & Coaching*, 4(1), 93–119. <https://doi.org/10.1260/1747-9541.4.1.93>
- Beedie, P., & Hudson, S. (2003). Emergence of mountain-based adventure tourism. *Annals of Tourism Research*, 30(3), 625–643. [https://doi.org/10.1016/S0160-7383\(03\)00043-4](https://doi.org/10.1016/S0160-7383(03)00043-4)
- Black, S. J., & Weiss, M. R. (1992). The relationship among perceived coaching behaviors, perceptions of ability, and Motivation in competitive age-group swimmers. *Journal of Sport & Exercise Psychology*, 14, 309–326. <https://doi.org/10.1123/jsep.14.3.309>
- Bloom, G. A., Crumpton, R., & Anderson, J. E. (1999). A systematic observation study of the

494 teaching behaviors of an expert basketball coach. / Une etude d'observation
 495 systematique des comportements pedagogiques d'un entraineur expert de basketball.
 496 *Sport Psychologist*, 13(2), 157–170. <https://doi.org/10.1123/tsp.13.2.157>

497 Braun, V., & Clarke, V. (2012). Thematic analysis. In Cooper H (Ed.), *APA handbook of*
 498 *research methods in psychology*. (2nd ed.). American Psychological Association.

499 Buckley, R. (2012). Rush as a key motivation in skilled adventure tourism : Resolving the
 500 risk recreation paradox. *Tourism Management*, 33(4), 961–970.
 501 <https://doi.org/10.1016/j.tourman.2011.10.002>

502 Cassidy, T., Jones, R. L., & Potrac, P. (2009). *Understanding sports coaching: the social,*
 503 *cultural and pedagogical foundations of coaching practice* (2nd Editio). Oxford, UK.:
 504 Routledge.

505 Christian, E., Berry, M., & Kearney, P. (2017). The identity, epistemology and
 506 developmental experiences of high-level adventure sports coaches. *Journal of Adventure*
 507 *Education and Outdoor Learning*, 17(4), 1–14.
 508 <https://doi.org/10.1080/14729679.2017.1341326>

509 Christian, E., Hodgson, C. I., Berry, M., & Kearney, P. (2019). It's not what, but where: how
 510 the accentuated features of the adventure sports coaching environment promote the
 511 development of sophisticated epistemic beliefs. *Journal of Adventure Education and*
 512 *Outdoor Learning*, 00(00), 1–13. <https://doi.org/10.1080/14729679.2019.1598879>

513 Collins, D., Collins, L., & Carson, H. J. (2016). “If it feels right, do it”: Intuitive decision
 514 making in a sample of high-level sport coaches. *Frontiers in Psychology*, 7(APR), 1–10.
 515 <https://doi.org/10.3389/fpsyg.2016.00504>

516 Collins, L., & Brymer, E. (2018). Understanding nature sports: a participant centred

517 perspective and its implications for the design and facilitating of learning and
 518 performance. *Annals of Leisure Research*, 0(0), 1–16.
 519 <https://doi.org/10.1080/11745398.2018.1525302>

520 Collins, L., Carson, H. J., & Collins, D. (2016). Metacognition and professional judgment
 521 and decision making in coaching: Importance, application and evaluation. *Human*
 522 *Kinetics in International Sport Coaching Journal*, 3(3), 355–36.
 523 <https://doi.org/10.1123/iscj.2016-0037>

524 Collins, L., & Collins, D. (2012). Conceptualizing the adventure-sports coach. *Journal of*
 525 *Adventure Education & Outdoor Learning*, 12(1), 81–93.
 526 <https://doi.org/10.1080/14729679.2011.611283>

527 Collins, L., & Collins, D. (2013). Decision Making and Risk Management in Adventure
 528 Sports Coaching. *Quest*, 65(1), 72–82. <https://doi.org/10.1080/00336297.2012.727373>

529 Collins, L., & Collins, D. (2015). Integration of professional judgement and decision-making
 530 in high-level adventure sports coaching practice. *Journal of Sports Sciences*, 33(6), 622–
 531 633. <https://doi.org/10.1080/02640414.2014.953980>

532 Collins, L., & Collins, D. (2016a). Challenges in Adventures Sports Coaching. In B.
 533 Humberstone, H. Prince, & K. A. Henderson (Eds.), *Routledge International Handbook*
 534 *of Outdoor Studies*. Oxford: Routledge. <https://doi.org/10.4324/9781315768465.ch44>

535 Collins, L., & Collins, D. (2016b). Professional judgement and decision-making in adventure
 536 sports coaching: the role of interaction. *Journal of Sports Sciences*, 34(13), 1231–1239.
 537 <https://doi.org/10.1080/02640414.2014.953980>

538 Collins, L., Collins, D., & Grecic, D. (2015). The epistemological chain in high-level
 539 adventure sports coaches. *Journal of Adventure Education and Outdoor Learning*, 15(3),

540 224–238. <https://doi.org/10.1080/14729679.2014.950592>

541 Côté, J. (2006). The Development of Coaching Knowledge. *International Journal of Sports*
542 *Science & Coaching*, 1(3), 217–222. <https://doi.org/10.1260/174795406778604609>

543 Côté, J., & Gilbert, W. (2009). An Integrative Definition of Coaching Effectiveness and
544 Expertise. *International Journal of Sports Science & Coaching*, 4(3), 307–323.
545 <https://doi.org/10.1260/174795409789623892>

546 Côté, J., Saimela, J., Trudel, P., Baria, A., & Russell, S. (1995). The Coaching Model: A
547 Grounded Assessment of Expert Gymnastic Coaches' Knowledge. *Journal of Sport and*
548 *Exercise Psychology*, 17(1), 1–17. <https://doi.org/10.1123/jsep.17.1.1>

549 Côté, J., & Sedgwick, W. A. (2003). Effective behaviors of expert rowing coaches : A
550 qualitative Investigation of Canadian Athletes and Coaches. *International Sports*
551 *Journal*, 7(1), 62–77.

552 Curran, T., Hill, A. P., Hall, H. K., & Jowett, G. E. (2015). Relationships between the Coach-
553 Created Motivational Climate and Athlete Engagement in Youth Sport. *Journal of Sport*
554 *and Exercise Psychology*, 37(2), 193–198. <https://doi.org/10.1123/jsep.2014-0203>

555 Deakin, H., & Wakefield, K. (2014). Skype interviewing: reflections of two PhD researchers.
556 *Qualitative Research*, 14(5), 603–616. <https://doi.org/10.1177/1468794113488126>

557 Doyle, J. R., Green, R. H., & Bottomley, P. A. (1997). Judging Relative Importance: Direct
558 Rating and Point Allocation Are Not Equivalent. *Organizational Behavior and Human*
559 *Decision Processes*, 70(1), 65–72. <https://doi.org/10.1006/obhd.1997.2694>

560 Drennan, J. (2003). Cognitive interviewing: verbal data in the design and pretesting of
561 questionnaires. *Journal of Advanced Nursing*, 42(1), 57–63.
562 <https://doi.org/10.1046/j.1365-2648.2003.02579.x>

563 Dunlock, H. L. (1993). Research Design : Descriptive Research Definitions of. *Journal of*
564 *Pediatric Oncology Nursing*, 10(4), 154–157.

565 Eastabrook, C., & Collins, L. (2019). Why do individuals seek out adventure sport coaching?
566 *Journal of Adventure Education and Outdoor Learning*, 1–14.
567 <https://doi.org/10.1080/14729679.2019.1660192>

568 Endsley, M. R. (1997). The role of situation awareness in naturalistic decision making. In C.
569 Zsombok & G. Klein (Eds.), *Naturalistic decision making* (pp. 269–284). New York:
570 Psychology Press.

571 Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating Rigor Using Thematic Analysis: A
572 Hybrid Approach of Inductive and Deductive Coding and Theme Development.
573 *International Journal of Qualitative Methods*, 5(1), 80–92.
574 <https://doi.org/10.1063/1.2011295>

575 Gearity, B. T. (2012). Poor teaching by the coach: A phenomenological description from
576 athletes’ experience of poor coaching. *Physical Education and Sport Pedagogy*, 17(1),
577 79–96. <https://doi.org/10.1080/17408989.2010.548061>

578 Gray, P., & Collins, D. (2016). The adventure sports coach: all show and no substance?
579 *Journal of Adventure Education and Outdoor Learning*, 16(2), 160–171.
580 <https://doi.org/10.1080/14729679.2015.1123163>

581 Ianiro, P. M., Lehmann-Willenbrock, N., & Kauffeld, S. (2015). Coaches and Clients in
582 Action: A Sequential Analysis of Interpersonal Coach and Client Behavior. *Journal of*
583 *Business and Psychology*, 30(3), 435–456. <https://doi.org/10.1007/s10869-014-9374-5>

584 Ives, Y. (2008). What is ‘Coaching ’? An Exploration of Conflicting Paradigms.
585 *International Journal of Evidence Based Coaching and Mentoring*, 6(2), 100–113.

586 <https://doi.org/http://ijebcm.brookes.ac.uk/documents/vol06issue2-paper-08.pdf>

587 Kerr, J. H., & Mackenzie, S. H. (2012). Multiple motives for participating in adventure
 588 sports. *Psychology of Sport and Exercise*, 13(5), 649–657.
 589 <https://doi.org/10.1016/j.psychsport.2012.04.002>

590 Lafrenière, M. A. K., Jowett, S., Vallerand, R. J., & Carbonneau, N. (2011). Passion for
 591 coaching and the quality of the coach-athlete relationship: The mediating role of
 592 coaching behaviors. *Psychology of Sport and Exercise*, 12(2), 144–152.
 593 <https://doi.org/10.1016/j.psychsport.2010.08.002>

594 Light, R. L., & Evans, J. R. (2013). Dispositions of elite-level Australian rugby coaches
 595 towards game sense: Characteristics of their coaching habitus. *Sport, Education and*
 596 *Society*, 18(3), 407–423. <https://doi.org/10.1080/13573322.2011.593506>

597 Lincoln, Y., & Guba, E. (2005). Paradigmatic controversies, contradictions, and emerging
 598 confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative*
 599 *research* (pp. 191–215). Thousand Oaks, CA: Sage Publications Ltd.

600 Lorimer, R., & Holland-Smith, D. (2012). Why Coach? A Case Study of the Prominent
 601 Influences on a Top-Level UK Outdoor Adventure Coach. *The Sport Psychologist*,
 602 26(4), 571–583. <https://doi.org/10.1123/tsp.26.4.571>

603 Loynes, C. (1998). Adventure in a Bun. *Journal of Experiential Education*, 21(1), 35–39.

604 Mackenzie, S. H., & Brymer, E. (2018). Conceptualizing adventurous nature sport: A
 605 positive psychology perspective. *Annals of Leisure Research*, 0(0), 1–13.
 606 <https://doi.org/10.1080/11745398.2018.1483733>

607 Mageau, G. A., & Vallerand, R. J. (2003). The coach-athlete relationship: A motivational
 608 model. *Journal of Sports Sciences*, 21(11), 883–904.

609 <https://doi.org/10.1080/0264041031000140374>

610 McElligott, S. (2015). *Overseas Expeditions : Self-Esteem and Transformational Leadership*.
611 University of Bangor, UK.

612 Nash, C., Martindale, R., Collins, D., & Martindale, A. (2012). Parameterising expertise in
613 coaching: Past, present and future. *Journal of Sports Sciences*, 30(10), 985–994.
614 <https://doi.org/10.1080/02640414.2012.682079>

615 Nelson, L. J., Cushion, C. J., & Potrac, P. (2006). Formal, Nonformal and Informal Coach
616 Learning: A Holistic Conceptualisation. *International Journal of Sports Science &*
617 *Coaching*, 1(3), 247–259. <https://doi.org/10.1260/174795406778604627>

618 O’Keefe, L. (2019). *Active Lives Adult Survey 17/18 Report*. Sports England.

619 Ojala, A., & Thorpe, H. (2015). The Role of the Coach in Action Sports : Using a Problem-
620 based Learning Approach A Case in Point : *International Sport Coaching Journal*, 2,
621 64–71. <https://doi.org/10.1123/iscj.2014-0096>

622 Pomfret, G., & Bramwell, B. (2016). The characteristics and motivational decisions of
623 outdoor adventure tourists: a review and analysis. *Current Issues in Tourism*, 19(14),
624 1447–1478. <https://doi.org/10.1080/13683500.2014.925430>

625 Price, M. S., & Weiss, M. R. (2013). Relationships among coach leadership, peer leadership,
626 and adolescent athletes’ psychosocial and team outcomes: A test of transformational
627 leadership theory. *Journal of Applied Sport Psychology*, 25(2), 265–279.
628 <https://doi.org/10.1080/10413200.2012.725703>

629 Robson, C. (2011). *Real World Research* (3rd ed.). Chichester: Wiley.

630 Sage, G. H. (1973). The coach as management: Organizational leadership in American sport.
631 *Quest*, 19(1), 35–40. <https://doi.org/10.1080/00336297.1973.10519747>

- 632 Saury, J., & Durand, M. (1998). Practical knowledge in expert coaches: On-site study of
633 coaching in sailing. *Research Quarterly for Exercise and Sport*, 69(3), 254–266.
634 <https://doi.org/10.1080/02701367.1998.10607692>
- 635 Schommer, M. (1994). Synthesizing epistemological belief research: Tentative
636 understandings and provocative confusions. *Educational Psychology Review*, 6(4), 293–
637 319. <https://doi.org/10.1007/BF02213418>
- 638 Sinfield, D., Allen, J., & Collins, L. (2019). A comparative analysis of the coaching skills
639 required by coaches operating in different non-competitive paddlesport settings. *Journal*
640 *of Adventure Education and Outdoor Learning*, 00(00), 1–15.
641 <https://doi.org/10.1080/14729679.2019.1609998>
- 642 Sinickas, A. (2007). Finding a Cure for Survey Fatigue. *Strategic Communication*
643 *Management*, 11(2), 11.
- 644 Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: problems
645 and opportunities within sport and exercise psychology. *International Review of Sport*
646 *and Exercise Psychology*, 11(1), 101–121.
647 <https://doi.org/10.1080/1750984X.2017.1317357>
- 648 Smith, J. A., Larkin, M., & Flowers, P. (2009). *Interpretative Phenomenological Analysis:*
649 *Understanding Method and Application*. London: Sage.
- 650 Stoszkowski, J., & Collins, D. (2012). Communities of practice, social learning and
651 networks: exploiting the social side of coach development. *Sport, Education and*
652 *Society*, 19(9), 773–788. <https://doi.org/10.1080/13573322.2012.692671>
- 653 Tozer, M., Fazey, I., & Fazey, J. (2007). Recognizing and developing adaptive expertise
654 within outdoor and expedition leaders. *Journal of Adventure Education & Outdoor*

655 *Learning*, 7(1), 55–75. <https://doi.org/10.1080/14729670701349780>

656 Varley, P. (2006). Confecting Adventure and Playing with Meaning : The Adventure
657 Commodification Continuum. *Journal of Sport & Tourism*, 11(2), 173–194.
658 <https://doi.org/10.1080/14775080601155217>

659 Vella, S. a., Oades, L. G., & Crowe, T. P. (2012). Validation of the differentiated
660 transformational leadership inventory as a measure of coach leadership in youth soccer.
661 *Sport Psychologist*, 26(2), 207–223. <https://doi.org/10.1123/tsp.26.2.207>

662 Weiss, M. R., Barber, H., Sisley, B. L., & Ebbeck, V. (1991). Developing competence and
663 confidence in novice female coaches: II. Perceptions of ability and affective experiences
664 following a season-long coaching internship. *Journal of Sport & Exercise Psychology*,
665 13(4), 336–363.

666 Zhang, Y., & Wildemuth, B. M. (2006). Unstructured interviews. *Applications of Social*
667 *Research Methods to Questions in Information and Library Science*, (1998), 222–231.

668 Zoharbi, M. (2016). Mixed Method Research: Instruments, Validity, Reliability and
669 Reporting Findings. *Theory and Practice in Language Studies*, 3(2), 254–262.

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Initial Question	Secondary Question	Prompts
Administration		
	Questions	
	Signed consent	
	Remind interviewee they are free to withdraw at any time	
Can you tell me about your most recent coaching session?	Where did it take place?	Location
	Who was it with?	Duration
	What was the best part?	Commercial operator
What did you expect from the overall experience?	Any learning objectives?	TTPP
	Experiencing any specific issues?	Enjoyment
	New challenge or environments?	Culture of adventure
How did the coach meet your expectations?	How friendly was the coach or their warmth of welcome?	Quality of resources
	Was there a personalised plan for the course?	Teaching ability
	What activities did you undertake?	The technical ability of the coach
How important was it that the coach took you on a <i>real</i> adventure?	Where did the coaching take place?	Challenge

What did the coach do to aid your long-term learning aspirations?	Did you feel comfortable in the places you went to?	Learning opportunities
	Do you feel more able to re-visit those places post-coaching?	Self-belief
		Self-efficacy
		Adventure
	Do you have a specific action plan to follow?	Independence
		Self-directed learning
	What do you still need to practice?	Environments
	What adventures can you now have?	Challenges
		Venues
		Community of practice

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676 Table 2

677 *Thematic analysis of the semi-structured interviews*

High-Order Themes (2)	Mid-Order Themes (10)
Coaching behaviour	Coach is the source of confidence
	Interpersonal skills
	Coach's enthusiasm
	Coach was inspirational
	Coach has high credibility
Capacity to adapt	Individualised approach
	Adaptive course programme
	Observation and analysis
	Coach's depth of knowledge
	Range of coaching strategies

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680 Table 3

681 *Descriptive data analysis of the survey, displaying relative importance of mid-order themes*

High-Order Theme	Mid-Order Theme	Mean	SD	Skew
Coaching behaviour	Coach is the source of confidence	24.9	11.2	0.7
	Interpersonal skills	23.5	10.3	1.8
	Coach's enthusiasm	20.4	7.2	0.6
	Coach has high credibility	15.8	8.9	0.6
	Coach is inspirational	15.5	7.9	0.7
Capacity to adapt	Individualised approach	24.5	9.9	1.3
	Coach's depth of knowledge	21.2	9.7	1.9
	Observation and analysis	19.9	7.6	0.7
	Range of coaching strategies	17.3	7.2	-0.4
	Adaptive course programme	17.1	7.3	0.2

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